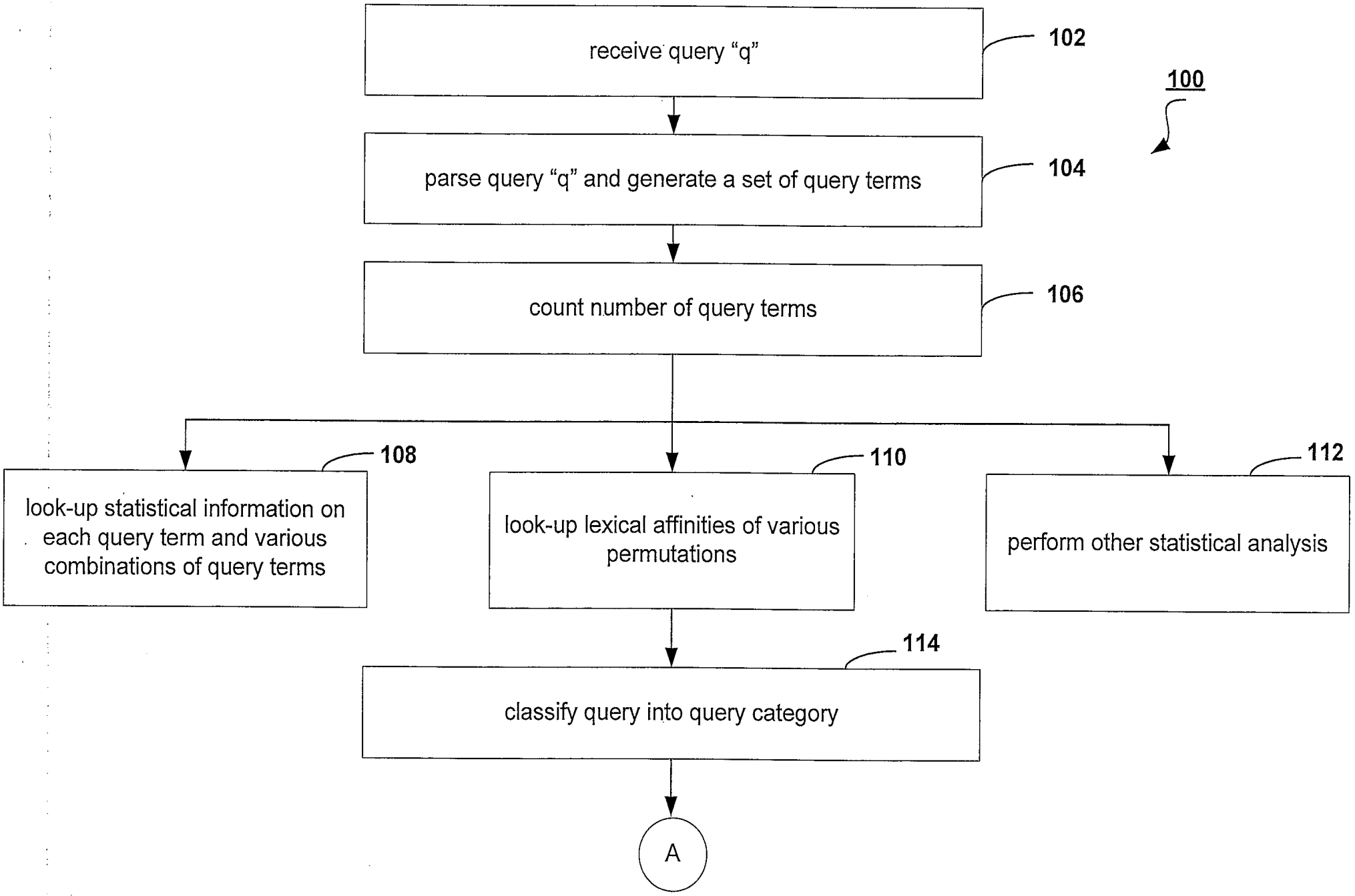
receive query "q"
102
100
parse query "q" and generate a set of query terms
104
count number of query terms
106
look-up statistical information on each query term and various combinations of query terms
108
look-up lexical affinities of various permutations
110
perform other statistical analysis
112
classify query into query category
114
A

FIGURE 1A

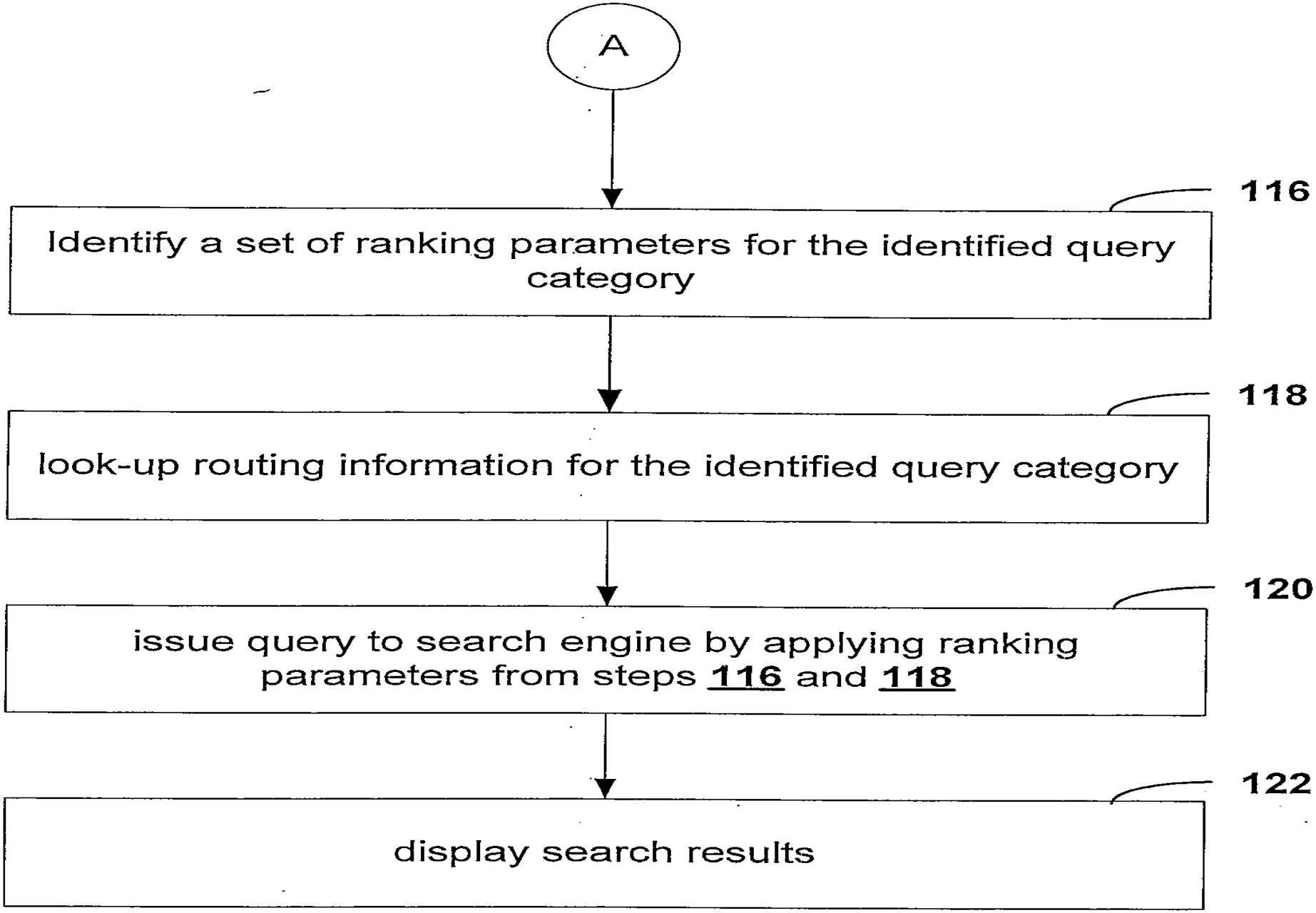
A
116
Identify a set of ranking parameters for the identified query category
118
look-up routing information for the identified query category
120
issue query to search engine by applying ranking parameters from steps 116 and 118
122
display search results

FIGURE 1B

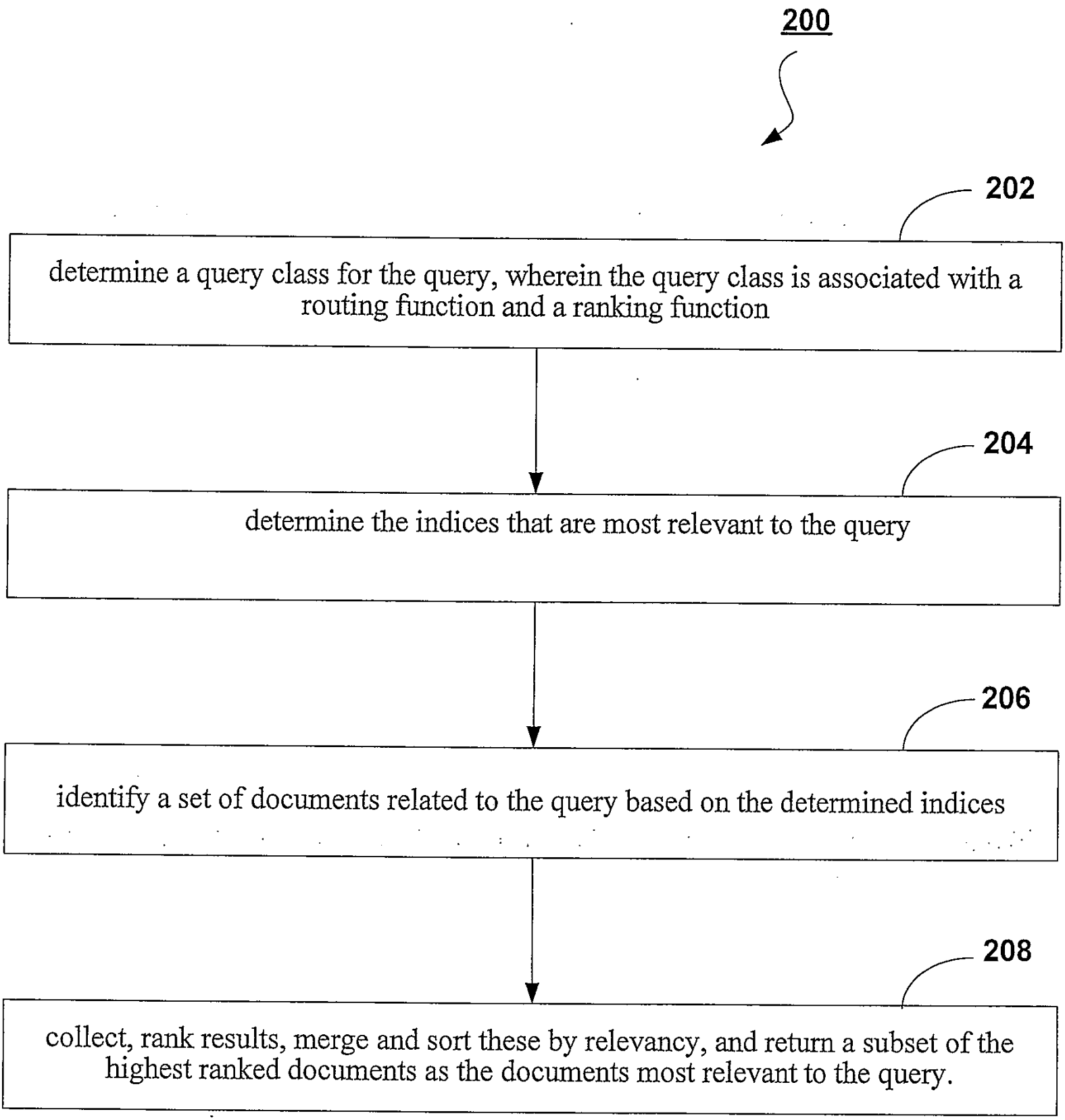
200
202
determine a query class for the query, wherein the query class is associated with a routing function and a ranking function
204
determine the indices that are most relevant to the query
206
identify a set of documents related to the query based on the determined indices
208
collect, rank results, merge and sort these by relevancy, and return a subset of the highest ranked documents as the documents most relevant to the query.

FIGURE 2

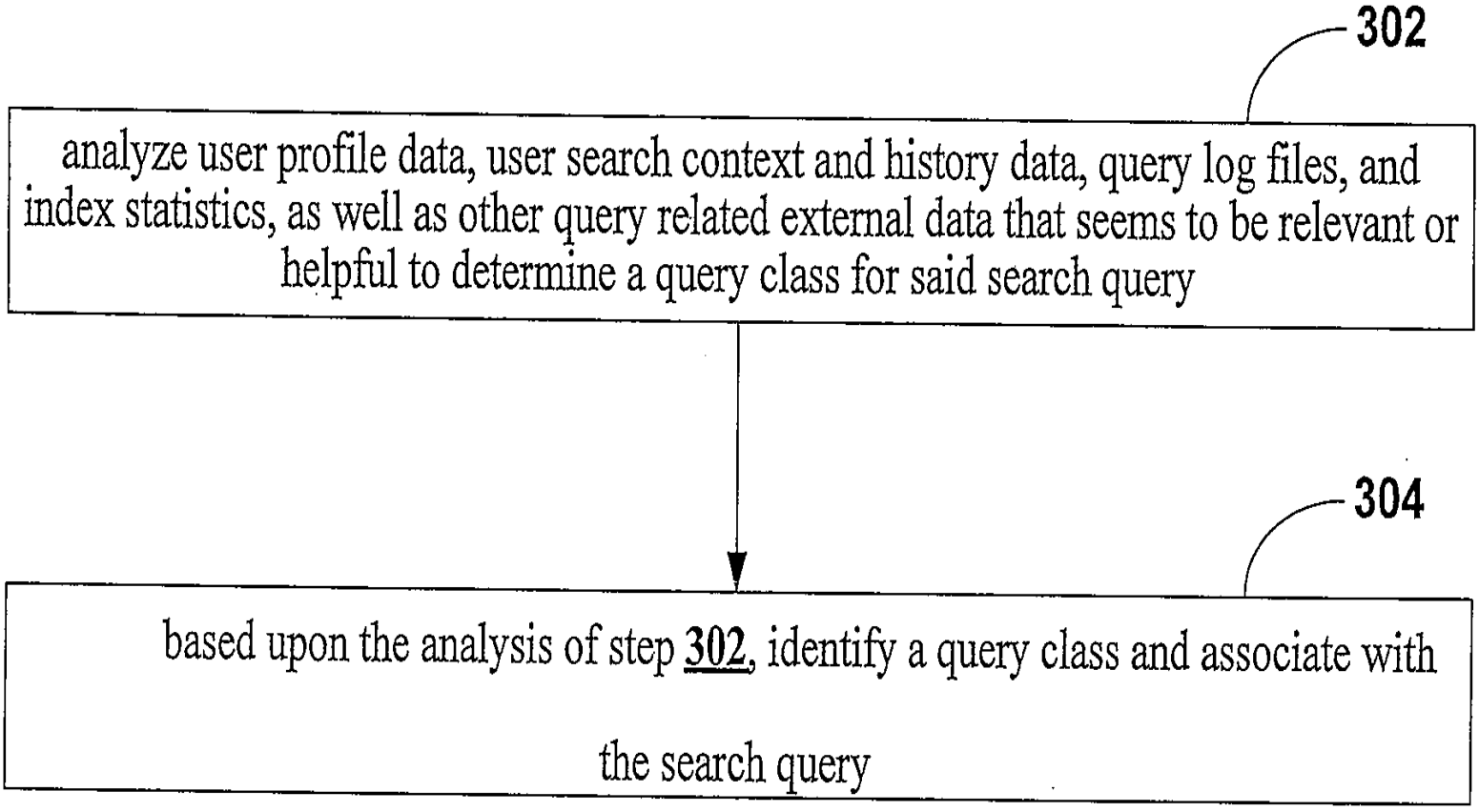
302
analyze user profile data, user search context and history data, query log files, and index statistics, as well as other query related external data that seems to be relevant or helpful to determine a query class for said search query
304
based upon the analysis of step 302, identify a query class and associate with the search query

FIGURE 3

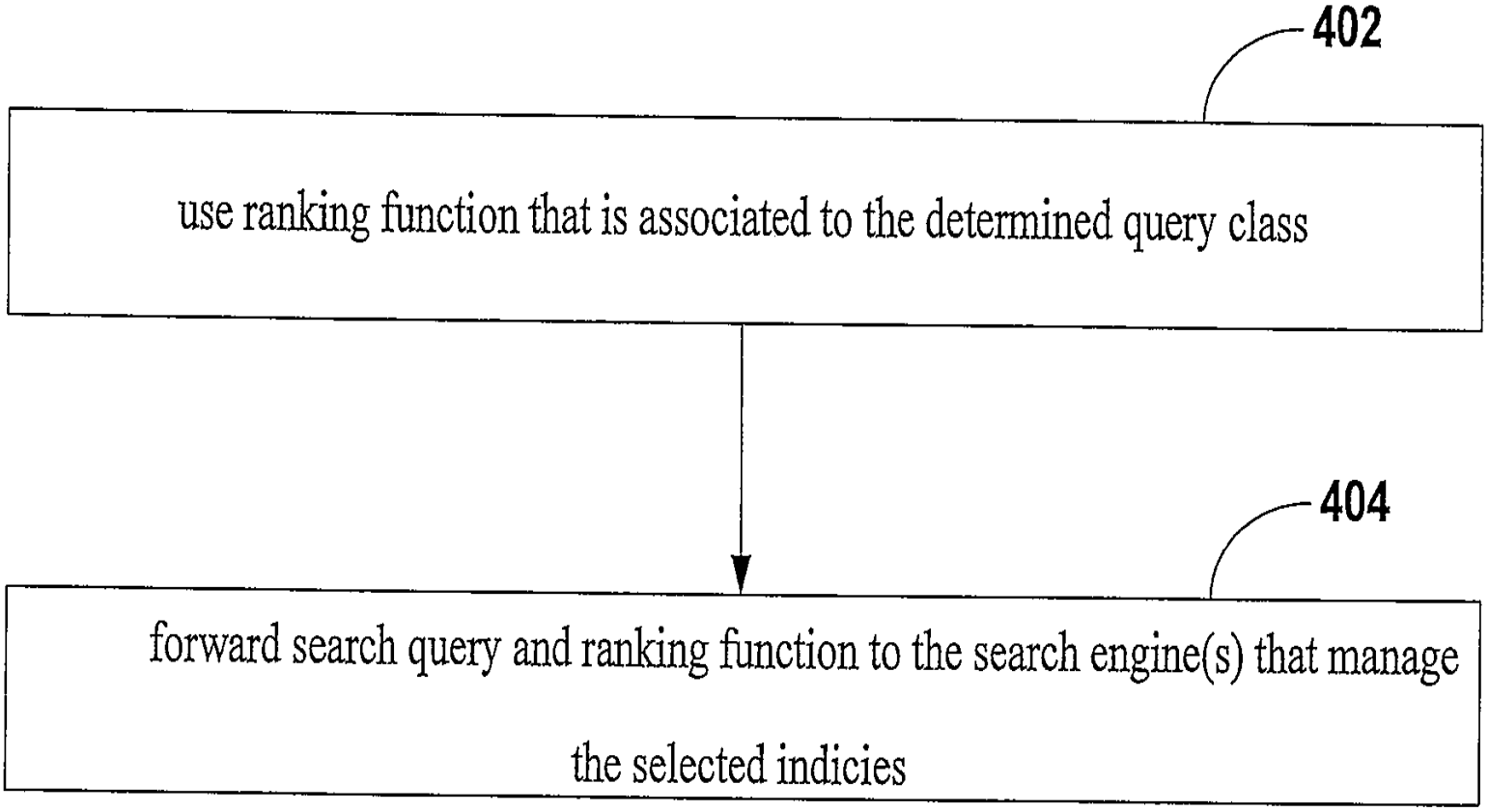
402
use ranking function that is associated to the determined query class
404
forward search query and ranking function to the search engine(s) that manage the selected indicies

FIGURE 4

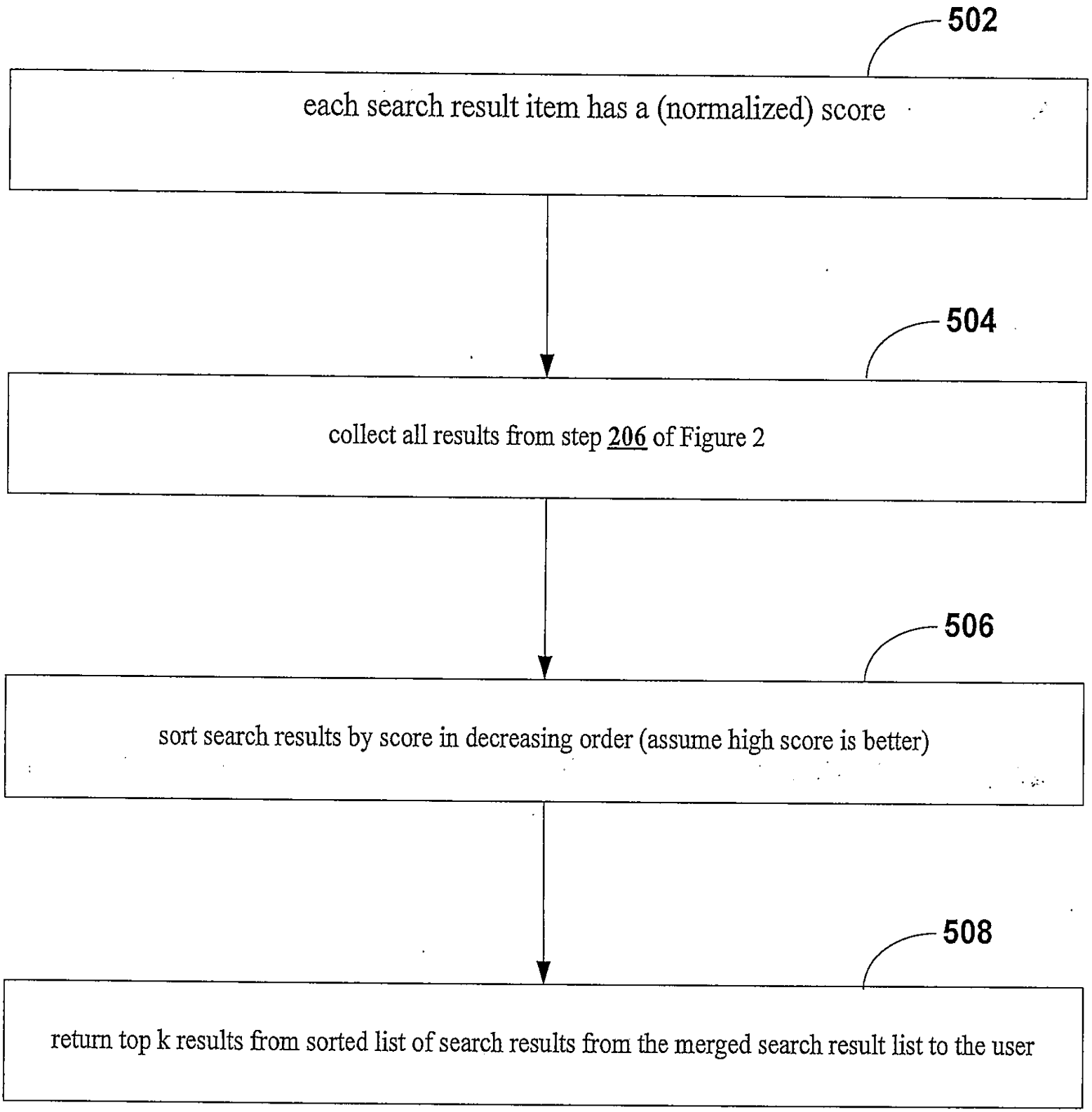
502
each search result item has a (normalized) score
504
collect all results from step 206 of Figure 2
506
sort search results by score in decreasing order (assume high score is better)
508
return top k results from sorted list of search results from the merged search result list to the user

FIGURE 5